

# Coronavirus Disease 2019 (COVID-19)

## Migration and Border Health

Considerations for Health Screening for COVID-19 at Points of Entry

### Introduction

This document is meant to assist Ministries of Health and their point-of-entry (POE) partners in determining whether and how to conduct traveler screening at POE for coronavirus (COVID-19).

The objective of screening is to reduce the international spread of communicable disease by detecting departing travelers who are sick or who have been exposed to the disease and preventing them from leaving the country they are in (exit screening) or by detecting them upon arrival and directing them to appropriate care and follow up, as needed (entry screening). Public health screening occurs in two stages: (1) Primary screening, which includes observing travelers for obvious signs of illness, measuring temperature, and collecting information on travel and exposure history; and (2) secondary screening, which includes having a healthcare or public health professional (whenever possible) conduct an additional public health assessment of ill or potentially exposed travelers identified through the primary screening process.

In addition to detecting ill travelers, public health screening at POE provides an excellent opportunity for countries to educate travelers about the signs and symptoms of COVID-19, how to protect themselves and their families from infection, and what to do if they become ill.

### Border Health Strategies to Contain the Spread of COVID-19

National Center for Emerging and Zoonotic Infectious Diseases



## Border Health Strategies to Contain the Spread of COVID-19

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23 June 2020

Public health screening at POE can be resource intensive, but it is a flexible intervention that can be scaled up or down according to the needs of the country and the status of the outbreak. It is important that countries continuously monitor the evolution of the pandemic globally, nationally, and locally, and adjust screening processes according to current needs.

For example, screening may be most important and effective early in an outbreak, when it presents an opportunity to slow the geographic spread of a disease of public health concern, allowing further time for unaffected areas to prepare their health systems, citizens, and social institutions (e.g., schools, businesses) for possible disease importation. Countries may wish to adopt different screening strategies after a communicable disease has been introduced and there is sustained transmission in local communities. At that stage, entry screening may no longer be the best use of limited human and other resources; traveler education and community mitigation strategies (e.g., social distancing, closing schools, canceling or postponing of mass gatherings) may be more beneficial at slowing the disease's spread.

The sections below provide guidance on the following:

- How and what to communicate with travelers about COVID-19
- Limitations of POE screening
- Checklist for countries to know if they have the capacity to implement public health screening at POE

## Opportunities for Health Officials to Communicate with the Traveling Public

Points of entry provide important opportunities and venues for health officials to communicate with travelers about the risk of COVID-19 in their countries and in other countries, how to protect themselves during travel, as well as what to expect after travel, especially if they have been in a country with active community transmission of COVID-19.

The following are some recommended communication strategies for countries to consider developing in addition to, or apart from, other public health measures instituted at POE.

Key information to share with travelers includes:

- Symptoms of COVID-19
- How to self-monitor for illness and what to do if symptoms develop
- Public health measures in place at departure and destination POE
- How to prepare for upcoming international travel, including:
  - Measures to stay healthy and reduce the risk of infection during travel
  - Recommendations to regularly check information posted on official government websites of the destination country to find out about:
    - Presence of ongoing community transmission of COVID-19
    - Screening and regulatory measures (i.e., isolation, quarantine) in place
    - Availability of healthcare services at their destination
  - Screening and regulatory measures they should expect upon return to their country of origin.

Methods of communication for travel related messaging include:

- Distributing Travel Health Alert Notices (T-HAN) – a paper handout given to arriving or departing travelers containing information about COVID-19

- Displaying health messages where most international travelers enter or leave the POE.
- Creating audio or video messages for airlines to broadcast during flights with information about COVID-19 and public health measures that have been employed at the destination POE.
- Disseminating messages, e.g., through social media

For examples of traveler health communications, visit: [Communication Resources for Travelers](#).

## Limitations of Public Health Screening at POE

Public health screening at POE is subject to several limitations and should be supplemented with enhanced community surveillance and other public health measures.<sup>1</sup>

The following limitations of public health screening at POE should be kept in mind:

- Screening is most effective for detecting overtly ill travelers; travelers who are infected, but not exhibiting signs of illness (e.g., presymptomatic or asymptomatic) may be missed during screening at POE, especially if they do not self-report a possible exposure (see 3rd limitation below).
  - COVID-19 transmission from presymptomatic and asymptomatic infected persons is known to occur. This reduces the effectiveness of public health screening at POE, particularly exit screening, as asymptomatic travelers could infect co-passengers or others within the POE itself.
- Obtaining reliable temperature readings is affected by multiple factors, including:
  - The ambient environment in which the temperature is measured. If the environment is extremely hot or cold, body temperature readings may be affected, regardless of the temperature-taking device that is used.
  - Proper calibration of the thermometers per manufacturer standards. Improper calibration can lead to incorrect temperature readings.
  - Proper usage and reading of the thermometers. Non-contact infrared thermometers frequently used for health screening must be held at a certain distance from the temporal artery in the forehead to take the temperature correctly. Holding the device too far from or too close to the temporal artery affects the reading.
- Screening is dependent on travelers behaving in a manner that may conflict with their immediate personal interest. To prevent disruptions to their travel, individuals may not reveal information about their symptoms or exposure history or try to disguise symptoms by taking medication.

## Implementing COVID-19 Screening at a POE

These questions are meant to guide countries through considerations about the capacities needed to implement public health screening at POE. CDC recommends that countries do not implement screening until they can answer “Yes” to all “Yes/No” questions and have mechanisms in place to respond to suspected cases identified at POE, including for isolation or quarantine up to 14 days.

Does the COUNTRY have:

1. The legal and regulatory authorities to detain, isolate, or quarantine travelers passing through a point of entry?
2. Sufficient funding to support screening and follow-up actions including:

Is there funding to pay for:

- Screeners’ salaries
- Screening supplies and equipment

- Food, water, other necessities for quarantined travelers
- Follow up of travelers who may have been exposed to COVID-19

Countries should consider overall funding needs and sources of funding both in the short and long terms.

3. A place to house travelers away from the POE for prolonged quarantine where their safety as well as their physical and mental health can be assured?
4. A method to provide food, water, medications, and other necessities to quarantined individuals?
5. A way to enable quarantined individuals to receive and send communications?
6. Has the country identified a referral healthcare facility for each priority POE where the staff will send ill travelers for diagnosis and care?

Does the POE have:

1. Protocols for primary and secondary screening, including a clear definition for suspected cases, based on illness presentation and/or exposure history?

Primary screening should not be undertaken without having defined mechanisms in place to manage travelers meeting the primary screening definition of a suspected case, including those who are not ill but who have reported an exposure. That is, do not begin implementing primary screening without the ability to follow up when suspected cases are identified.

2. An adequate number of trained primary and secondary screeners who demonstrate competency in carrying out assigned screening tasks?

Primary screeners do not need to have prior health or medical experience; they can be anyone who demonstrates competency in taking a temperature, observing for signs and symptom of illness, reviewing a health declaration form, and determining if a person needs to be sent to secondary screening.

Secondary screeners should ideally have medical training (nurse or physician).

The number of primary screeners needed may vary by POE and the resources available. Ideally, there should be two primary screeners for every 60 travelers per hour. Primary screeners should work in pairs, with one screener conducting visual observation and temperature checks, and the other asking questions or reviewing health declaration forms to obtain information about travel history, possible exposures, and signs and symptoms of illness. Screening of each traveler should take less than approximately 1 minute/person, noting that most non-contact infrared thermometers require a rest period of 15–60 seconds between temperature readings, depending on the brand.

One onsite secondary screener per shift at each POE is usually enough.

3. Adequate personal protective equipment (PPE)<sup>2</sup> and screening tools (non- contact thermometers, batteries, health declaration forms, etc.)?
4. A way to isolate suspected cases safely and away from other travelers and POE personnel to await further evaluation or transfer to a healthcare facility?

CDC recommends that travelers with suspected COVID-19 not be held at the POE longer than necessary. As soon as possible after identifying a suspect case, the traveler should be transported to a pre-determined referral healthcare facility with known capacity to handle COVID-19.

5. An isolation area equipped with its own access to potable water, toilet, handwashing facilities, touch-free trash receptacles, and a place to sit or lie down?

# Additional considerations for countries considering implementing screening at ground crossings or shipping ports

- Unlike airports, which have the established infrastructure, resources, and ability to funnel travelers through controlled pathways to enforce screening compliance, ground crossings and shipping ports often lack the infrastructure and resources to effectively carry out screening in a systematic way.
- Screening at ground crossings slows travel and can be easy to bypass by taking a detour around the screening point, leading to travelers crossing along unstaffed sections of the border. Travelers who do not wish to be delayed, or who are sick and do not want to be prevented from traveling, may try to bypass POE screening.
- Countries should evaluate their available resources and take a risk-based approach when determining which POE to select for public health screening activities. Some factors to consider are:
  - The volume of travelers through the POE
  - Types of travelers (demographic information, where they are coming from/going to/stopping at, purpose of travel)
  - The POE's connectivity to geographic areas with known community
  - transmission of COVID-19
  - Whether cases have occurred nearby and/or in heavily populated areas
  - Screening feasibility (Is there a way to direct travelers through the screening process? Can screening staff easily access the designated location? Can ill travelers be isolated safely at the POE and transported to a referral healthcare facility?)
- Screening should only be implemented at POE where the safety and security, of both travelers and screening personnel can be assured (e.g., screening should not be located in areas vulnerable to violence or outside areas lacking shade or protection from the elements).

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## Footnotes

<sup>1</sup> Measures may include contact tracing, community mitigation measures, social distancing, wearing a cloth face covering in public, and quarantine., as well as analyzing where travelers go after leaving the POE and how those locations are connected to other parts of the country. Such analyses can help to predict where the disease may spread if introduced via travel.

<sup>2</sup> Follow guidance on PPE use for healthcare workers conducting screening activities issued by your own country or by the [WHO](#)  .